Independence Parkway Reopening Plan 4/23/19

This plan has been developed to:

- Identify the factors that Harris County needs to evaluate to make a recommendation regarding the safety of the roadway and its opening to public passage
- identify the actions and/or alternatives necessary to determine if the Independence Parkway (IP) is safe to open for public traffic

Factors Considered:

- Atmospheric conditions
  - Ambient Benzene Concentrations
    - ITC/IC written approved plan regarding trigger's (atmospheric conditions) for reopening Independence Parkway to the public

- Physical conditions requiring remediation
  - Visually confirmed areas (staining, distressed vegetation, etc.)
  - Contamination confirmed above TRRP PCLs via lab analysis

Surface soil sampling will not take place when benzene concentrations are greater than the action level determined by ITC in the atmosphere. Should conditions change during a sampling event and benzene concentrations rise above the action level, sampling will cease and will resume when atmospheric conditions return to below the ITC established action level for benzene.

As noted in the sampling plan (Attachment), samples will be collected and analyzed for the following:

- VOCs
- SVOCs
- TPH
- 8 RCRA Metals
- PFAS

Note: Analysis will be compared to the Texas Risk Reduction Program Tier 1 Commercial/Industrial Protective Concentration Levels (PCLs) for soils protective of dermal contact, inhalation, and ingestion exposure routes

Soil Contamination

Both visually and analytically confirmed surface soil impacted from the ITC fire will require barriers to be placed such that public access to those areas is restricted. The barriers will remain in place until all remediation in barriered areas has been completed (See below Barriers)

Air Monitoring

Air monitoring will be conducted on a continuous basis using handheld instruments (MultiRAE for VOC or UltraRAE with benzene specific colorimetric tubes). Other instruments may be used as needed, limited to those approved in the air monitoring and sampling plans. Monitoring personnel will roam through the north and south areas of IP, as well as near Tidal road.

The following air monitoring criteria will be followed regarding monitoring and road closures due to benzene and atmospheric conditions:

VOC/benzene concentrations remain < 1 ppm in atmosphere:

- **Open IP no restrictions**

VOC/benzene detection reported at or above 1 ppm and less than 2.5 ppm on IP:

- Follow-up detection with benzene readings every 5-10 minutes for 1 hour using benzene specific monitor.
  - **Road closure** (See Road Closure Notifications) if 1-hr average on IP > 1 ppm
  - Continue to monitor benzene levels
    - If 15-minute average on IP is > 1.0 ppm, **allow controlled access to authorized persons with appropriate respiratory protection** (industry drivers who are medically cleared and fit tested to wear respirators)
    - If 1-hr average < 1.0 ppm, **open IP and continue monitoring**

VOC/Benzene detection reported at or above 2.5 ppm on IP:

- Collect at least 2 additional readings within 15-minute period using benzene specific monitor to confirm elevated benzene above 2.5 ppm
  - **Road closure** if 15-minute average on IP is > 2.5 ppm
  - Continue to monitor benzene levels
    - If 15-minute average on IP is > 1.0 ppm, **allow controlled access to authorized persons with appropriate respiratory protection** (industry drivers who are medically cleared and fit tested to wear respirators)
    - If 1-hr average < 1.0 ppm, **open IP and continue monitoring area where >2.5 ppm detection occurred for additional 1 hour.**

Road Closure Notifications:

- The following notifications shall be made upon closure of IP and again upon reopening
  - City of Deer Park
  - City of LaPorte
  - Monument Inn Restaurant
  - TP&W – San Jacinto State Park
  - Harris County Pct 2 Ferry operations
  - Industry Partners

- EMERGE
- HCOEM
- HC Judge's Office
- HCFMO
- HCPH
- HCPCS
- HC Pct 2
- HCSO

Air monitoring will be conducted continuously along IP for a minimum of 48 hours after the tanks are declared clean.

Barrier Location

Barriers (chain linked fence, etc.) will be placed along the IP and any other roadways with visually confirmed impact from ITC. Additional barriers will be placed in areas where soil sampling analytical show an exceedance of a TRRP PCL. All barriers will remain in place until such time remediation has occurred and analytical indicates no TRRP PCL exceedances. The barrier locations for the visually confirmed locations will be marked via upside down marker paint the day sampling occurs. Should analytical show the need for additional barriers, those areas will be marked via the same upside-down marker paint.

Signage

Signage be required and will be located on or near the barriers in clear view and will, at a minimum, include the following:

No Parking
No Stopping
No Standing
No Trespassing
Anytime

Law Enforcement

Until IP is opened with no restrictions, there will be a full-time law enforcement presence to ensure all restrictions are adhered to.

Attachment

INDEPENDENCE PARKWAY SAMPLING AND ANALYSIS PLAN rv2

Independence Parkway Assessment

To determine potential impact from the ITC fire along Independence Parkway, Tidal Road, and Vista Road, a maximum of 22 surface soil samples will be collected and analyzed. Two initial surface soil samples will be collected beside the roadway on the east and west side of Independence Parkway and south of Tidal Road near the ITC facility. One initial surface soil sample will be collected beside the roadway on the

north side of Tidal Road and west of Independence Parkway. Two initial surface soil samples will be collected from beside the roadway on the east and west side of Independence Parkway and north of Tidal Road. These surface soil samples will be field screened for organic vapors using a photo-ionization detector (PID) or equivalent. Up to four additional surface soil samples will be collected from beside the roadway along Independence Parkway south of the two initial surface soil samples Up to seven additional surface soil samples will be collected from beside the roadway along Tidal Road west of the initial surface soil sample and up to Tucker Bayou. Up to four additional surface soil samples will be collected from the beside the roadway north of the two initial surface soil samples collected north of the Independence Parkway and Tidal Road intersect (see attached Surface Sample Location Map). These additional samples will be collected based upon diminishing organic vapor field screening readings. To establish background soil concentrations for this area, one surface soil sample will be collected from beside the public roadway north of State Highway 225 (see Background Surface Sample Location Map). *Note: Due to the concrete lining of the roadway ditch south of Tidal Road just west of Independence Parkway, the two surface soil samples initially proposed from that area have been eliminated from this plan. Additionally, no surface soil samples will be collected from within the drainage ditches along the referenced roadways. If guardrails are present at the proposed sample locations, the samples will be collected from between the paved roadway surface and the guardrail if sufficient soil material is present. If guardrails are present and sufficient soil material between the roadway and the guardrail is absent, the surface soil sample will be collected from the backside of the guardrail.*

The samples will be submitted to the laboratory and analyzed for the COC list below:

- VOCs by EPA Method 5035/8260B;
- SVOCs by EPA Method 8270C;
- TPH by Texas Method 1005;
- RCRA 8 Metals by Methods 6010 and 7471;
- PFASs by EPA Method 537 or ASTM D7979

Duplicate samples will be collected at a ratio of one per every ten samples. To assist with the laboratory accuracy and precision and in accordance with EPA guidance, one matrix spike (MS)/ matrix spike duplicate (MSD) sample will be collected at a ratio of one to twenty samples.

All samples will be properly containerized in sterile laboratory provided containers and kept on ice in laboratory provided coolers until submitted for analysis. Surface soil samples will be submitted for analysis to ALS Laboratories (ALS) in Houston, Texas with a "Rush" turnaround time (TAT).

In addition to the duplicate and MS/MSD soil samples, one aqueous field blank (FB) will be collected, one equipment blank (EB) will be collected at the end of each sampling day, and one trip blank will be provided for each cooler containing VOC, SVOC, and PFAS samples for storage and transportation.